



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,888	08/04/2003	Lawrence Bernard Kool	130031-1	6541

6147 7590 07/21/2006  
GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH  
PATENT DOCKET RM. BLDG. K1-4A59  
NISKAYUNA, NY 12309

EXAMINER

JOLLEY, KIRSTEN

ART UNIT PAPER NUMBER

1762

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/633,888

Applicant(s)

KOOL ET AL.

Examiner

Kirsten C. Jolley

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.  
4a) Of the above claim(s) 1-27 and 40-44 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 28-39 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of Group II in the reply filed on May 8, 2006 is acknowledged. The traversal is on the ground(s) that the procedural mechanism for dividing Groups I and II is not supported by a practical illustration. Applicant argues that while it might be possible to employ the claimed composition to aluminize a polymeric or ceramic substrate, that is not a realistic end use for the composition. This is not found persuasive because use to aluminize a polymeric or ceramic substrate is only one exemplary possible use of the claimed composition. As discussed in the previous Office action, composition claims are examined based on only the components of the composition itself. The intended use of a composition is not germane to the issue of patentability of the composition. Therefore there is an additional burden in searching and examining the composition claims because the claimed composition may be used for merely providing a metallic surface-coating paint to an object, for example; the search and examination are not just limited the area of diffusion aluminiding a metallic surface. Additionally, different considerations arise in examining method versus composition claims. For these reasons, the Examiner maintains that the restriction requirement is appropriate and proper.

Applicant also argues that the claims in Groups II and III can be searched by way of a single effort as well as improved computer-searching capabilities. Applicant also states that in view of the fact that restriction between Groups II and III is not actually mandated, reconsideration is requested. It is the Examiner's position that, based on the different issues that arise in examining article versus method claims, differing search areas, and additional burden of

Art Unit: 1762

examination (as discussed in the prior Office action, and for reasons similar to those discussed above with respect to the composition claims), the restriction requirement is appropriate and proper and is maintained.

With respect to the restriction between Groups I and III, Applicant argues that the two groups of claims are not related as a legitimate "intermediate-final product relationship." The Examiner notes that both the composition and coated product groupings are product claims, and that the composition (intermediate product) is useful to make other than the final product claimed. The MPEP does not limit this relationship to chemical intermediates.

The requirement is still deemed proper and is therefore made FINAL.

#### ***Response to Arguments***

2. Applicant's arguments filed May 8, 2006 have been fully considered but they are not persuasive.

With regard to the 35 102(b) rejections over McMordie et al., Applicant argues that McMordie fails to disclose slurry compositions which must be substantially free of hexavalent chromium as in the present invention. Applicant states that certain compositions in the patent which happen to omit mention of chromium do not satisfy this key limitation, and that chromium is certainly a key constituent in some embodiments of McMordie. This is not convincing to the Examiner. While some embodiments of McMordie may disclose use of chromium, others such as Example 5 clearly do not include chromium, and thus are free of hexavalent chromium. The reference need not state that hexavalent chromium is specifically *not* used in order to anticipate the claims. Further, McMordie et al. states that chromium is an optional component in the slurry

Art Unit: 1762

in col. 7, lines 56-57, which is a clear teaching to one skilled in the art that chromium may be omitted from the slurry.

Applicant also argues that McMordie always requires a platinum diffusion step. The Examiner notes, and is also admitted in Applicant's response, a first step of platinum diffusion into the substrate is not outside the scope of the claims.

Applicant argues that the present invention requires the use of colloidal silica, while McMordie only mentions the material once in reference to one exemplary coating composition. The Examiner notes that even if only taught once, the use of colloidal silica is none-the-less taught by McMordie et al.

With respect to the 35 USC 103(a) rejections over McMordie et al., Applicant argues that McMordie provides a general description of the desirability of diffusing platinum, silicon, and nickel into the substrate, however the reference shows no recognition of the motivation to determine a specific region of aluminum diffusion. The Examiner maintains that a specific region of aluminum diffusion necessarily occurs, and the level of diffusion would be dependent upon a number of factors including the length of time and temperature of treatment, the particular substrate material, the atmosphere in which treatment occurs, etc. It would have been obvious for one having ordinary skill in the art to have determined the optimum diffusion depth through routine experimentation, in the absence of a showing of criticality.

With respect to the 35 USC 103(a) rejections over McMordie et al. taken in view of Baldi, Applicant argues that Baldi fails to describe a single composition which includes both

Art Unit: 1762

colloidal silica and aluminum-based powder, and that embodiments of the reference teach against the use of a aluminum-silicon constituent. The Examiner notes that Baldi is applied merely for its teaching of use of a binder/organic stabilizer in a slurry composition for aluminiding a metal surface in order to improve the binding characteristics. The Examiner maintains that it would have been obvious to have added a binder/organic stabilizer in McMordie et al.'s composition, upon seeing the prior art of Baldi, with the expectation of improved binding of the slurry without serious side effects. Applicant also argues that neither reference describes the use of Applicant's claimed slurry, or a slurry which specifically excludes the use of hexavalent chromium. As discussed above, the reference need not specifically discuss the deliberate exclusion of hexavalent chromium. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test of obviousness is not express suggestion of the claimed invention in any or all references but rather what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them. *In re Rosselet*, 347 F.2d 847, 146 USPQ 183 (CCPA 1965); *In re Hedges*, 783 F.2d 1038.

With respect to the 35 USC 103(a) rejections over Mor et al., Applicant argues that Mor is not depositing a slurry coating onto a metal substrate. Instead Applicant argues that the patent is directed to a two-step process in which a metallic coating is first applied over the substrate and then a slurry coating is applied over the metallic coating. First, the Examiner notes that the

Art Unit: 1762

substrate in Mor et al. may be metallic -- in the Examples, a steel incinerator is the substrate.

Secondly, the substrate may alternatively be considered to be the combination of the substrate with a nickel-based superalloy coating thereon.

Applicant argues that Mor has nothing to do with the specific purpose of the present invention. It is well settled that the prior art need not disclose the same purpose for a claimed method in order to establish its obviousness under 35 USC 103. It is not necessary that the prior art achieve the same advantage or result discovered by applicant. *In re Dillon*, 919 F.2d 688, 693, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990), *cert. denied*, 500 US 409 (1991). *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972).

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 28-29 and 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by McMordie et al. (US 5,650,235).

The claims remain rejected for the same reasons discussed in the prior Office action, as well as for the reasons discussed above in section 2.

#### ***Claim Rejections - 35 USC § 103***

Art Unit: 1762

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over McMordie et al.

The claim remains rejected for the same reasons discussed in the prior Office action, as well as for the reasons discussed above in section 2.

7. Claims 30-32 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMordie et al. as applied to claims 28-29 and 33-37 above, and further in view of Baldi (US 5,102,700).

The claims remain rejected for the same reasons discussed in the prior Office action, as well as for the reasons discussed above in section 2.

8. Claims 28-29 and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mor et al. (US 6,428,630).

The claims remain rejected for the same reasons discussed in the prior Office action, as well as for the reasons discussed above in section 2.

9. Claims 30-32 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mor et al. as applied to claims 28-29 and 33-37 above, and further in view of Baldi (US 5,102,700).



The claims remain rejected for the same reasons discussed in the prior Office action, as well as for the reasons discussed above in section 2.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

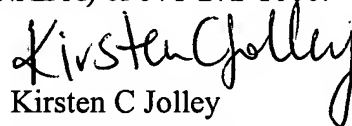
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1762

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Kirsten C Jolley  
Primary Examiner  
Art Unit 1762

kcj